WHAT IS CLAIMED IS:

1. A method for operating a gas turbine engine to facilitate reducing an amount of emissions from a combustor including a mixer assembly including a pilot mixer, a main mixer, and a centerbody extending therebetween, the pilot mixer including a pilot fuel nozzle and a plurality of axial swirlers, the main mixer including a main swirler and a plurality of fuel injection ports, said method comprising:

injecting fuel into the combustor through the pilot mixer, such that the fuel is discharged downstream from the pilot mixer axial swirlers; and

directing flow exiting the pilot mixer with a lip extending from the centerbody into a pilot flame zone downstream from said pilot mixer.

2. A method in accordance with Claim 1 wherein the centerbody includes a divergent portion, an aft portion, and a lip that extends therebetween, directing flow exiting the pilot mixer further comprises directing flow into the pilot flame zone with the centerbody lip.

3. A method in accordance with Claim 2 wherein directing flow into the pilot flame zone with the centerbody lip further comprises directing flow with the lip to facilitate reducing deposit formation along the centerbody radially inner surface.

4. A method in accordance with Claim 2 wherein directing flow into the pilot flame zone with the centerbody lip further comprises directing flow with the lip to facilitate isolating flows exiting the pilot mixer from flows exiting the main mixer.

5. A method in accordance with Claim 2 wherein directing flow into the pilot flame zone with the centerbody lip further comprises directing flow into the pilot flame zone with a lip including an extension, a corner, and a back approach including a radius.

6. A method in accordance with Claim 2 wherein directing flow into the pilot flame zone with the centerbody lip further comprises directing flow with the

lip to facilitate preventing fuel from filming against said centerbody inner surface aft portion.

7. A combustor for a gas turbine comprising:

a pilot mixer comprising an air splitter, a pilot fuel nozzle, and a plurality of axial air swirlers upstream from said pilot fuel nozzle, said air splitter downstream from said pilot fuel nozzle, said air swirlers radially outward from and concentrically mounted with respect to said pilot fuel nozzle;

a main mixer radially outward from and concentrically aligned with respect to said pilot mixer, said main mixer comprising a plurality of fuel injection ports and a swirler comprising at least one of a conical air swirler and a cyclone air swirler, said main mixer swirler upstream from said main mixer fuel injection ports; and

an annular centerbody extending between said pilot mixer and main mixer, said centerbody comprising a radially inner surface comprising a divergent portion, an aft portion, and a lip extending outwardly therebetween.

8. A combustor in accordance with Claim 7 wherein said centerbody inner surface lip configured to separate flow from said centerbody inner surface.

9. A combustor in accordance with Claim 7 wherein said centerbody inner surface lip configured to facilitate reducing deposit formation along said centerbody radially inner surface.

10. A combustor in accordance with Claim 7 wherein said centerbody inner surface lip configured to facilitate isolating pilot flows from cyclone flows within said combustor.

11. A combustor in accordance with Claim 7 wherein said centerbody inner surface lip comprises an extension, a corner, and a back approach, said corner extending between said extension and said back approach.

12. A combustor in accordance with Claim 11 wherein said centerbody surface lip back approach facilitates preventing fuel from filming against said centerbody inner surface aft portion.

13. A combustor in accordance with Claim 11 wherein said centerbody surface lip corner facilitates directing pilot flow into a pilot flame zone downstream from said pilot mixer.

14. A mixer assembly for a gas turbine engine combustor, said mixer assembly configured to control emissions from the combustor and comprising a pilot mixer, a main mixer, and an annular centerbody, said pilot mixer comprising a pilot fuel nozzle, and a plurality of axial swirlers upstream and radially outward from said pilot fuel nozzle, said main mixer radially outward from and concentric with respect to said pilot mixer, said main mixer comprising a plurality of fuel injection ports and a swirler upstream from said fuel injection ports, said centerbody extending between said main mixer and said pilot mixer and configured to direct flow exiting said pilot mixer into a pilot flame zone downstream from said pilot mixer.

15. A mixer assembly in accordance with Claim 14 wherein said annular centerbody comprises a radially inner surface comprising a divergent portion, an aft portion, and a lip extending outwardly therebetween and configured to facilitate isolating a flow exiting said pilot mixer from a flow exiting said main mixer.

16. A mixer assembly in accordance with Claim 15 wherein said centerbody inner surface lip configured to facilitate reducing deposit formation along said centerbody radially inner surface.

17. A mixer assembly in accordance with Claim 15 wherein said centerbody inner surface lip comprises an extension, a corner, and a back approach, said corner extending between said extension and said back approach.

18. A mixer assembly in accordance with Claim 17 wherein said centerbody surface lip back approach facilitates preventing fuel from filming against said centerbody inner surface aft portion

19. A mixer assembly in accordance with Claim 17 wherein said centerbody surface lip back approach comprises a radius.

20. A mixer assembly in accordance with Claim 17 wherein said main mixer comprises at least one of a conical main swirler and a cyclone air swirler.